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SUPERSEDING
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PURCHASE DESCRIPTION

CHASSIS, WEAPON, FULL-TRACKED, F12253500, PROCESSING FOR STORAGE AND SHIPMENT OF

This purchase description is approved for use by the U.S. Army Tank-automotive and Armaments Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

- 1.1 <u>Scope</u>. This purchase description covers the processing of the chassis, weapon, full-tracked, F12253500, for storage and shipment.
 - 1.2 <u>Classification</u>. Processing shall be of the following levels as specified (see 6.2).

Level A - <u>Maximum military protection</u>.

Level A is the processing required for the protection of vehicle during shipment, handling, and storage exceeding 90 days from date of actual processing. This level does not provide for driveaway capability. It does provide for domestic or overseas shipment, including open deck loading.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

AMSC N/A

AREA PACK
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Level B - <u>Minimum military protection</u>.

Level B is the limited processing required for the protection of vehicle during shipment, handling, and storage not to exceed 90 days from date of actual processing. This level provides for driveway capability, when specified, and domestic or overseas shipment (excluding open deck loading).

2. APPLICABLE DOCUMENTS

2.1 <u>General</u>. The documents listed in this section are specified in sections 3 and 4 of this purchase description. This section does not include documents cited in other sections of this purchase description or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirement documents cited in sections 3 and 4 of this purchase description, whether or not they are listed.

2.2 Government documents.

2.2.1 <u>Specifications, standards, and handbooks</u>. Unless otherwise specified, the following specifications and standards of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation, form a part of this purchase description to the extent specified herein.

SPECIFICATIONS

FEDERAL

A-A-208	- Ink, Marking, Stencil, Opaque (Porous and Non-Porous
	Surfaces).
A-A-374	- Sodium Bicarbonate, Technical.
A-A-883	- Tape, Pressure Sensitive, Masking.
A-A-1800	- Varnish, Oil: Spar.
A-A-1894	- Paper, Kraft, Treated.
A-A-52506	- Clamps, Hose.
A-A-52546	- Hose, Performed: Semi-Flexible, Reinforced.
A-A-52557	- Fuel, Oil, Diesel; For Posts, Camps and Stations.
A-A-52624	- Antifreeze, Multi-Engine Type.
A-A-55057	- Panels, Wood/Wood Based; Construction and
	Decorative.
MMM-A-179	- Adhesive, Paper Label.
O-S-801	- Sulfuric Acid, Electrolyte; for Storage Batteries.

PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP-B-621	- Boxes, Wood, Nailed, and Lock-Corner.
PPP-C-1752	- Cushioning Material, Packaging, Unicellular
	Polyethylene Foam, Flexible.
VV-L-800	- Lubricating Oil, General Purpose, Preservative (Water-
	Displacing, Low Temperature).

DEPARTMENT OF DEFENSE

MIL-C-450	- Coating-Compound, Bituminous Solvent Type, Black
	(for Ammunition).
MIL-C-5501	- Cap and Plug, Protective, Dust and Moisture Seal.
MIL-H-6083	- Hydraulic Fluid, Petroleum Base, for Preservation and
	Operation.
MIL-B-11188	- Battery, Storage, Lead-Acid.
MIL-PRF-16173	- Corrosion Preventive Compound, Solvent Cutback,
	Cold-Application.
MIL-L-21260	- Lubricating Oil, Internal Combustion Engine,
	Preservative and Break-In.
MIL-B-22191	- Barrier Material, Transparent, Flexible, Heat Sealable.
MIL-P-46002	- Preservative Oil, Contact and Volatile Corrosion-
	Inhibited.
MIL-P-52905	- Paint, Camouflage, Removable.
MIL-A-53009	- Additive, Antifreeze Extender, Liquid Cooling Systems.
MIL-D-81298	- Dye, Liquid for the Detection of Leaks in Aircraft Fuel
	Systems.
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STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-129	- Marking for Shipment and Storage.
MIL-STD-2073-1	- Military Packaging, Standard Practice for.
MS27183	- Washer, Flat-Round, Steel, Cadmium Plated, General
	Purpose.
MS51922	- Nut, Self Locking, Hexagon Prevailing Torque, General
	Purpose, 250 Degrees Fahrenheit.
MS90725	- Screw, Cap, Hexagon Head (Finished Hexagon Bolt),
	Steel, Grade 5, Cadmium Plated, UNC-2A.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other government documents, drawings, and publications. The following document(s) form a part of this document to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

DEPARTMENT OF TRANSPORTATION (DOT)

Hazardous Materials Regulations.

(Application for copies should be addressed to the Department of Transportation, Hazardous Materials Regulations Board, Washington, DC 25090.)

Federal Motor Carrier Safety Regulations (FMCSR).

(Application for copies should be addressed to the Department of Transportation, Bureau of Motor Carrier Safety, Washington, DC 25090.)

2.3 <u>Non-Government publications</u>. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A228/A228M	- Steel Wire, Music Spring Quality, Standard
	Specification for (DoD Adopted).
ASTM D1974	- Methods of Closing, Sealing, and Reinforcing
	Fiberboard Boxes, Standard Specification for (DoD
	Adopted).
ASTM D3953	- Flat Steel and Seals, Standard Specification for (DoD
	Adopted).
ASTM D5118	- Fabrication of Fiberboard Shipping Boxes, Standard
	Specification for (DoD Adopted).
ASTM D5330	- Pressure-Sensitive Tape for Packaging, Filament-
	Reinforced, Standard Specification for (DoD Adopted).

ASTM D5486

- Pressure-Sensitive Tape for Packaging, Box Closure, and Sealing, Standard Specification for (DoD Adopted).

ASTM E437

- Industrial Wire Cloth and Screens (Square Opening Series), Standard Specification for (DoD Adopted).

(Application for copies of ASTM publications may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

ASSOCIATION OF AMERICAN RAILROADS PUBLICATIONS

Section No. 1

 General Rules Governing Loading of Commodities on Open Top Cars.

 Section No. 6

 Rules Governing the Loading of Department of Defense Material on Open Top Cars.

(Application for copies should be addressed to the Association of American Railroads, 59 East Van Buren, Chicago, IL 60605.)

2.4 <u>Order of precedence</u>. In the event of a conflict between the text of this purchase description and the references cited herein, the text of this purchase description shall take precedence.

3. REQUIREMENTS

3.1 Level A.

- 3.1.1 One of the first 10 production vehicles. Unless otherwise specified (see 6.2), one of the first 10 production processed vehicles shall be subjected to the inspection specified in 4.2. Approval of this vehicle shall not relieve the contractor of his obligation to process all vehicles in accordance with this purchase description. Unless otherwise specified by the acquisition activity, any change to materials or design after approval shall require additional vehicles be inspected as specified in 4.2. Government representative shall select the vehicle to be inspected.
- 3.1.2 Government furnished equipment. Unless previously accomplished, Government furnished equipment (GFE) (other than installed) shall be packaged in accordance with the individual document for the specific item. GFE shall be stowed with basic issue items (BII).
- 3.1.3 <u>Preservatives and atomized spray equipment</u>. When atomized spraying of preservative oils is specified, equipment shown in figures 1 and 2, or equivalent, shall be used. Compressed air supply lines shall be equipped with moisture separators every 50 feet or fraction thereof.

- 3.1.4 <u>Processing records</u>. Records of vehicle processing shall be maintained and shall be readily available for review by Government representative.
- 3.1.5 <u>Disassembly</u>. Projecting parts whose removal will accomplish desired cube reduction and parts susceptible to damage and pilferage, shall be removed from the vehicle. Removed bolts, nuts, screws, pins, and washers shall be placed in one of the mating parts and secured. Removed parts shall be packaged, identified, and stowed securely within the vehicle.
- 3.1.5.1 <u>Matchmarking</u>. Parts removed from the vehicle shall be matchmarked when necessary to facilitate reassembly. Matchmarking information shall be put on cloth shipping tags or on metal tags using waterproof ink or paint, and attached to mating parts. The marked cloth shipping tags shall be waterproofed with varnish conforming to A-A-1800 or adhesive conforming to MMM-A-179.
- 3.1.6 Record forms. Two copies of DD Form 1397 shall be provided. Information on forms shall include preservation accomplished and depreservation instructions. The Equipment Log Book Binder and one copy of DD Form 1397 (see 6.4) shall be placed in a bag conforming to Type I, class B, style 2, 6 mil of MIL-B-117; bag shall be closed by heat sealing and securely attached in driver compartment of the vehicle. The other copy of DD Form 1397 shall be water-proofed with adhesive conforming to MMM-A-179 or placed in a bag conforming to Type I, class B, style 2 of MIL-B-117. Bag shall be closed by heat sealing and securely attached in a conspicuous location on the exterior of the vehicle.

3.1.7 Cleaning and drying (see 4.5.2.1).

- 3.1.7.1 <u>Interior of vehicle</u>. Interior surfaces of the vehicle shall be cleaned with a solution consisting of a commercial heavy duty detergent and warm water. Solution temperature shall not exceed 210 degrees Fahrenheit (°F) and pressure shall not exceed 5 pounds per square inch (psi) measured 4 in. from the nozzle. After cleaning, cleaned surfaces shall be rinsed with clean water and dried. Care shall be taken during cleaning and rinsing to assure that no solution or water enters instruments, connections, or other components susceptible to water damage. Solution or water shall not accumulate and remain in cavities that cannot be drained. Vehicles with decals, markers, and straps and floor plates installed shall only be hand cleaned with commercial heavy duty detergent and water to prevent damage to these components. Cleaned surfaces shall be hand rinsed and dried.
- 3.1.7.2 Exterior of vehicle. Exterior of vehicle shall be cleaned using a solution of heavy duty detergent in warm water or steam. Cleaning shall remove all foreign matter. After cleaning, surfaces shall be rinsed with clean water or steam and thoroughly dried. Care shall be taken to avoid entry of water or steam into driver or engine compartments.

3.1.8 Preservation.

- 3.1.8.1 <u>Relubrication</u>. If vehicle has been operated more than 75 miles since lubrication or after vehicle has been cleaned in accordance with 3.1.7.2, the vehicle shall be relubricated using materials conforming to drawing, specification, or lubrication order applicable to the vehicle. All exposed oil can points shall be levers, locking levers, locking bars, locking pins, pintle pins, hinge pins, strikers, wing nuts, door locks, hand-operated locking knobs, latches, linkage, threaded ends of yokes, and related clevis pins shall be coated with lubricant conforming to VV-L-800. Excess lubricant shall be removed after coating.
- 3.1.8.2 <u>Preservation of battery supports and retainers</u>. Top battery supports and retainers shall be preserved with compound conforming to MIL-C-450.
- 3.1.8.3 <u>Transmission</u>, transfer assembly, control differential, and final drives. Transmission shall contain lubricating oil conforming to Type I, grade 10 of MIL-L-21260 filled to operating level. Transfer assembly, control differential, and final drives shall contain lubricating oil conforming to Type I, grade 10 or 30 as applicable, of MIL-L-21260 filled to operating level. DD Form 1397 shall be annotated with type and grade of lubricant used (see 3.1.6).
- 3.1.8.4 <u>Cooling system</u>. Cooling system shall be protected by one of the following procedures:
 - a. For shipment and storage in areas where temperature drops below 40°F, systems shall be protected as specified in 3.1.8.4.3.
 - b. For shipment and storage within the bounds of 30 degrees north latitude and 20 degrees south latitude, except continental United States, systems shall be protected as specified in 3.1.8.4.2.
 - c. For all other shipments, cooling systems shall be protected as specified in 3.1.8.4.1.

NOTE: DD Form 1397 (see 3.1.6) shall be completed to indicate coolant used.

3.1.8.4.1 <u>Water and antifreeze procedure</u>. Cooling system shall be filled to operating level with a clean solution consisting of equal parts by volume of antifreeze conforming to A-A-52624 and water. Engine shall be operated until a temperature has been reached that causes thermostat to open to assure complete mixing and even distribution of the antifreeze solution. A warning tag bearing the information, "COOLING SYSTEM FILLED WITH WATER AND ANTIFREEZE SOLUTION (ETHYLENE GLYCOL) IN EQUAL PARTS BY VOLUME - DO NOT DRAIN", shall be securely attached to radiator filler neck.

- 3.1.8.4.2 <u>Water and corrosion inhibitor procedure</u>. Cooling system shall be filled with clear water up to the radiator upper tank. A corrosion inhibitor conforming to MIL-A-53009 shall be added in the proportion of 5 ounces (oz) of the inhibitor for each 10 quarts (qt) of water. The inhibitor shall be dissolved in 2 qt of warm water and poured into the radiator while the engine is idling. More water shall be added if necessary, to fill the radiator to operating level. A warning tag bearing the information, "COOLING SYSTEM DOES NOT CONTAIN ANTIFREEZE FILLED WITH WATER AND INHIBITOR", shall be securely attached to the radiator filler neck.
- 3.1.8.4.3 <u>Antifreeze compound procedure</u>. Cooling system shall be filled to operating level with antifreeze compound conforming to A-A-52624. The compound shall be used without dilution. A warning tag bearing the information, "COOLING SYSTEM FILLED WITH ANTIFREEZE (ARCTIC-TYPE) DO NOT DRAIN", shall be securely attached to radiator filler neck.
- 3.1.8.5 <u>Engine crankcase preservation</u>. Crankcase of compression ignition engines shall be filled to operating level with lubricating oil conforming to Type I of MIL-L-21260 of the seasonal grade specified in the applicable drawing, specification, or lubrication order. DD Form 1397 shall be annotated with type and grade of lubricant used.
- 3.1.8.6 <u>Compression ignition engine</u>. Compression ignition engine preservation shall be an uninterrupted sequence in accordance with 3.1.8.6.1 through 3.1.8.6.3.
- 3.1.8.6.1 Fuel system and combustion chamber. Prior to processing, engine shall be cooled to assure that cylinder head temperature measured at injector nozzle flange surface of all cylinders is not more than 100°F. Cooling shall be accomplished by induced air currents, circulation of engine coolant, or by waiting the period of time required to arrive at the above specified temperature. When ambient temperature exceeds 100°F, engine shall be cooled to ambient temperature. After the engine has been cooled, the fuel supply system from the fuel tank shall be shut off. A portable container with two compartments shall be positioned to provide gravity feed to the engine. One compartment shall be filled with preservative oil conforming to grade 1 of MIL-P-46002 to which an oil soluble red dye conforming to MIL-D-81298 has been added, in a concentration sufficient to impart a marked coloring to the oil. The second compartment shall be filled with diesel fuel conforming to A-A-52557. (The container shown in figure 3 has proven satisfactory for engine preservation.) Disconnect the fuel line between the primary fuel filter and fuel pump at the primary fuel filter outlet. Drain the diesel fuel from the secondary fuel filter. Remove filter can and remove filter element. Fill filter can with preservative oil grade 1 of MIL-P-46002 and replace. Connect fuel line from auxiliary fuel container to fuel pump supply line. Disconnect vehicle fuel return line at quick disconnect coupling. Connect a transparent plastic fuel line to the engine end of the disconnected fuel return line. Insert the other end of plastic fuel line into a recovery container to collect the returned oil. Disconnect air cleaner

hose from the air inlet elbow. An air restrictor boot shall be installed on air inlet elbow and secured to assure that air to the engine is completely cutoff. (The air restrictor boot shown in figure 4 has proven satisfactory for engine preservation.) The regulator valve on the auxiliary fuel container shall be turned to the preservative oil position (grade 1, MIL-P-46002). Place engine fuel control in run position. Crank engine with starter (NOTE: Engine may fire for approximately 5 seconds) for not less than 30 seconds and not more than 45 seconds. The regulator valve on the auxiliary fuel container shall be turned to the off position. Remove the filter can from the secondary fuel filter. Drain the preservative oil grade 1 of MIL-P-46002, from can. Wipe clean with lint free cloth. Replace element, fill can with diesel fuel oil A-A-52557, and replace filter can (see 4.5.2.4).

CAUTION: Special precautions shall be taken not to exceed time limits specified or the engine starter solenoid may be damaged. Excessive cranking may cause hydrostatic locks by injecting too much oil into combustion chambers.

3.1.8.6.2 <u>Engine purging</u>. Purge fuel return lines of all preservative oil (grade 1, MIL-P-46002), by turning the auxiliary fuel tank valve to the diesel fuel position and closing engine fuel control shut off. Crank engine with starter to remove all traces of red colored lubricating oil from the plastic return line.

CAUTION: Do not operate starter for a period exceeding 45 seconds.

If preservative oil has not been purged, rest starter for 3 minutes and repeat purge procedure. Turn the auxiliary fuel container valve to the off position. Remove fuel line and reconnect to the outlet side of primary fuel filter. Turn on vehicle fuel supply system. Remove air restrictor boot. Disconnect plastic fuel return line and reconnect vehicle fuel return line at the quick disconnect coupling (see 4.5.2.4).

3.1.8.6.3 Preservation through air intake and exhaust system. After preservation in accordance with 3.1.8.6.1 and 3.1.8.6.2 atomize 1 oz of preservative oil conforming to grade 1 of MIL-P-46002 into the exhaust opening. Opening shall then be sealed with tape conforming to Type IV of ASTM D5486. The hose shall be disconnected at the air intake and 1 oz of preservation oil conforming to grade 1 of MIL-P-46002 shall be atomized into the air intake opening. The air intake opening and the engine crankcase breathers shall be sealed with plastic plugs conforming to MIL-C-5501 or with tape conforming to type IV of ASTM D5486. A red warning tag, bearing the information, "ENGINE PRESERVED WITH VCI - DO NOT CRANK" and "BEFORE CRANKING, REMOVE CAPS, TAPE, OR PLUGS, AND REINSTALL HOSE", shall be placed in a conspicuous location within driver compartment. DD Form 1397 shall be annotated to show engine is preserved with VCI and oil (see 4.5.2.4).

- 3.1.8.6.4 Preservation through oil level gage rod opening. After preservation in accordance with 3.1.8.6.1 and 3.1.8.6.2, the oil level gage rod shall be removed and 6 oz of preservative oil conforming to grade 1 of MIL-P-46002 shall be atomized into the crankcase through the oil level gage rod opening. An extension of sufficient length to permit the spray nozzle to be within the crankcase shall be used. Spray nozzle shall not be submerged in the crankcase oil. After spraying has been accomplished, oil level gage rod shall be reinstalled. All openings to the engine interior including oil level gage rod opening and oil filler cap, shall be sealed with tape conforming to type IV of ASTM D5486
- 3.1.8.6.5 <u>Preservation through flywheel housing</u>. Two ounces of preservative oil conforming to grade 1 of MIL-P-46002 shall be atomized into the flywheel housing.
- 3.1.8.6.6 <u>Air cleaner</u>. Air cleaner openings shall be sealed with tape conforming to type IV of ASTM D5486.
- 3.1.8.7 Personnel and engine compartment heaters and lines. Personnel and engine heaters shall have the fuel supply shut off valve located at the inlet side of fuel filters turned to the off position. The main fuel line supplying fuel to the heaters shall be disconnected at a point closest to shut off valves. Fuel from the lines shall be allowed to drain. Ends of disconnected fuel lines and shut off valves shall be sealed with plastic plugs or caps conforming to MIL-C-5501, or tape conforming to type IV of ASTM D5486. External exhaust stack shall have opening sealed with tape conforming to type IV of ASTM D5486. Plastic plug or cap conforming to MIL-C-5501 may be used. Four warning tags, each bearing the information: "HEATER FUEL LINES DISCONNECTED AND SEALED. PRIOR TO PLACING PERSONNEL OR ENGINE HEATERS IN OPERATION, REMOVE PLUGS, OR CAPS OR TAPE FROM FUEL LINES, EXHAUST STACK, AND SHUT OFF VALVES. OPERATE HEATER FUEL PUMP AND DRAIN A MINIMUM OF ONE QUART OF FUEL THROUGH THE FUEL LINES INTO A PORTABLE CONTAINER. RECONNECT HEATER FUEL LINES", shall be prepared. One tag each shall be secured to the personnel and engine heater operating switches and one each to the personnel and engine heaters.
- 3.1.8.8 <u>Fuel tank preservation</u>. Fuel tank shall be drained to the maximum extent possible. Fuel tank cap and filler screen shall be removed and coated with lubricating oil conforming to Type 1, grade 30 of MIL-L-21260. One quart of lubricating oil conforming to Type 1, grade 10 of MIL-L-21260 shall be added to each 5 gal or portion thereof of residual fuel that remains after draining tank. The contractor shall maintain a written procedure used to ascertain the amount of residual fuel. Tank cap and filler screen shall be reinstalled (see 4.5.2.2).
- 3.1.8.8.1 <u>Fuel tank security</u>. The armored fuel cap shall be secured with the combat lock after processing the fuel tank as specified in 3.1.8.8.

- 3.1.8.9 <u>Ramp winch assembly</u>. All unpainted metal surfaces of the ramp winch assembly, excluding cylinder rod, shall be coated with preservative conforming to grade 4 of MIL-PRF-16173.
- 3.1.8.9.1 <u>Ramp hydraulic reservoir</u>. Ramp hydraulic reservoir shall be filled with hydraulic fluid conforming to MIL-H-6083.
- 3.1.8.10 <u>Weapon station opening</u>. Weapon station opening shall be provided with a cover. Cover shall be fabricated and installed in accordance with figure 5.
- 3.1.8.11 <u>Hatches and doors</u>. Rubber seals around hatches and doors shall be coated with powered talc, technical, MIL-T-50036. For shipment, hatches and doors shall be closed and locked from the inside. Driver hatch shall be closed and secured with a bolt and nut with thread portion of bolt deformed to prevent nut removal. For storage, hatches and doors shall be locked from the inside. The ramp door shall be secured in open position for ventilation.

3.1.8.12 <u>Ventilation</u>.

- 3.1.8.12.1 Engine compartment access plate and drain plugs. Engine compartment access plate and gasket with attaching hardware shall be removed for ventilation. A screen conforming to figure 6 shall be installed in access plate opening and secured using four of the existing mounting screws and washers. The two forward MS drain plugs and rear bilge drain plug shall be removed for drainage. A screen conforming to figure 6A shall be installed in rear bilge opening and held in place with spring retainer conforming to figure 6B. Bare metal surfaces of drain plugs shall be preserved with compound conforming to grade 4 of MIL-PRF-16173. The plate, gasket, drain plugs, and four access plate mounting screws and washers shall be packaged as specified in 3.1.9.7. The information: "REMOVE SCREENS, INSTALL ACCESS PLATE AND GASKET, FRONT AND REAR, DRAIN PLUGS BEFORE VEHICLE OPERATION", shall be stenciled on the exterior of the vehicle using white or yellow paint conforming to MIL-P-13983. Stenciling shall be in characters not less than 3/4 in. high.
- 3.1.8.12.2 <u>Engine access compartment panels</u>. The lower rear engine compartment panel in the crew compartment shall be removed and stowed securely in the crew compartment. A warning tag bearing the information: "ENGINE COMPARTMENT PANEL REMOVED: LOWER RAMP OR OPEN HATCHES WHEN OPERATING ENGINE", shall be attached in a conspicuous location within the driver compartment.
- 3.1.8.13 <u>Miscellaneous preservation</u>. Unless as otherwise specified (see 4.5.2), exposed, unpainted metal surfaces on the exterior of the vehicle, except the track shoes, shall be coated with compound conforming to grade 1 of MIL-PRF-16173. Exposed, unpainted, unplated metal

surfaces on the interior of the vehicle shall be coated with compound conforming to grade 4 of MIL-PRF-16173.

3.1.9 Packaging.

- 3.1.9.1 Dry charged batteries and cables. Dry charged batteries shall be installed and secured in the vehicle battery carrier. Battery cables shall be secured to battery carrier with 3/4 in. tape conforming to Type IV ASTM D5330. Battery filler cap opening shall be sealed by placing a 2 in. wide by 3 mil thick piece of film conforming to Type II of MIL-B-22191 over each filler cap opening with cap removed. The sheet shall be of sufficient length to allow it to be depressed into the opening to the same depth as the filler plug. Filler caps shall be screwed or inserted into openings to form a complete seal without damaging the sheet. If batteries have been processed in accordance with MIL-B-11188, they need not be reprocessed as above.
- 3.1.9.2 <u>Electrolyte</u>. Electrolyte shall be packaged in accordance with O-S-801, except that the exterior container shall conform to PPP-B-621, class 2 or PPP-B-601, overseas type. Marking shall conform to O-S-801. The packed electrolyte shall be stowed in the same location as the BII and secured independently to permit separate removal.
- 3.1.9.3 <u>Packaging of backrests and seats</u>. Cushions of backrests and seats (see 3.1.7.1.2), shall be covered with paper conforming to A-A-1894 with a minimum basic weight of 60 pounds (lb). Paper shall be secured with tape conforming to A-A-883.
- 3.1.9.4 <u>Periscope</u>. Periscopes shall be removed from vehicle, cleaned, dried, and immediately packaged in accordance with Level A requirements of MIL-STD-2073-1, then securely stowed within personnel compartment.
- 3.1.9.5 <u>Fire extinguishers</u>. Fire extinguishers shall contain a minimum of 90 percent of rated full charge. All seals shall be intact. DD Form 253 shall be completed and attached securely to each extinguisher (see 6.3).
- 3.1.9.6 <u>Basic issue items (BII)</u>. Unless otherwise specified (see 6.2), BII shall be packed in accordance with MIL-STD-2073-1. BII shall be stowed and secured in accordance with 3.1.9.6.1.
- 3.1.9.6.1 Stowage and securement of BII. BII and items removed for shipment shall be identified to pertinent vehicle by serial number. BII shall be stored inside buildings. Packed BII and removed items shall be placed within the personnel compartment of vehicle. Large wooden boxes shall be placed on the vehicle floor and shall be secured with 1-1/4 in. wide strapping conforming to ASTM D3953. Strapping shall be secured holding devices within the compartment. Smaller wooden boxes shall be secured to the larger boxes with 3/4 in. wide

strapping conforming to ASTM D3953. All boxes shall be secured in such a manner as to prevent any movement during transit and to prevent damage to containers or vehicle interiors. Corner protectors shall be used under all strapping.

- 3.1.9.7 Access plate, gasket, and drain plugs. Access plate, gasket, and preserved drain plugs (see 3.1.8.12.1), shall be packaged in a box conforming to Type CF, class weather-resistant of ASTM D5118 or ASTM D1974. Box shall be closed with tape conforming to type I, class 1, of ASTM D5486, identified as to contents and securely stowed within personnel compartment.
- 3.1.9.8 <u>Packaging of tow hooks</u>. Tow hooks and related hardware shall be removed for shipment and packaged in a Type CF, class weather-resistant box conforming to ASTM D1974. Box shall be closed with tape conforming to type I, class 1 of ASTM D5486, identified as to contents and securely stowed within personnel compartment.

3.1.10 <u>Vehicle closure</u>.

- 3.1.10.1 <u>Tape-over spray closure</u>. Unless otherwise specified (see 6.2), each vehicle shall be protected with tape-over spray closure conforming to the requirements of Appendix A and figures 7 through 10. Tape-over spray closures shall be subjected to the water spray test specified in 40.3 of Appendix A.
- 3.2 <u>Level B</u>. Vehicles shall be processed in the same manner as specified for Level A with the following exceptions.
- 3.2.1 <u>Transmission</u>, transfer assembly, control differential, and final drives. Transmission, transfer assembly, control differential, and final drives shall contain operational lubricant as specified on applicable drawing, specification, or lubrication order filled to operating level. If these units contain lubricating oil conforming to Type I, grade 10 or 30 of MIL-L-21260, and additional amount of the same oil shall be added to attain operating level. Operating lubricants shall not be mixed with MIL-L-21260 except in an emergency. DD Form 1397 shall be annotated to indicate grade of lubricant or preservative oil used.
- 3.2.2 <u>Engine crankcase</u>. Engine crankcase shall contain normal operational lubricant as specified in lubrication order and filled to operational level. DD Form 1397 shall be annotated to indicate grade of lubricant used.
- 3.2.3 <u>Engine preservation</u>. The engine shall require no preservation for level B shipment and storage.
- 3.2.4 <u>Personnel heater and fuel pump</u>. Personnel heater and fuel pump shall be in ready-to-use condition. Heater exhaust opening shall be closed with a plastic plug conforming to

MIL-C-5501/7 (see figure 11). A warning tag bearing the information, "HEATER EXHAUST OPENING CLOSED, REMOVE PLUG BEFORE OPERATING", shall be attached to the heater controls.

- 3.2.5 <u>Residual fuel</u>. Unless otherwise specified (see 6.2), vehicle shall be shipped without draining residual fuel from the fuel tank. Fuel tank shall not be preserved.
- 3.2.6 <u>Backrests and seats</u>. Cushions of backrests and seats shall not be covered. If cushions are received packaged, they shall be stowed as received in the crew compartment.
 - 3.2.7 Tow hooks. Tow hooks shall be removed for overseas shipment only (see 3.1.9.8).
- 3.2.8 <u>Engine access compartment panels</u>. Engine compartment panels in crew compartments shall not be removed.
- 3.2.9 <u>Tape-over spray</u>. Tape-over spray shall not be provided for level B shipment and storage. Openings to vehicle interior shall be sealed in accordance with Appendix A except that over spray of the taping is not applicable. Tape shall conform to type III of ASTM 5486 (see 3.1.10.1). Paragraph 30.3.2.1 engine grilles does not apply.
- 3.2.10 <u>Vision block openings</u>. Plugs conforming to PPP-C-1752, type I, class 2, shall be installed in all vision block openings (see figure 11).
- 3.2.11 <u>Bilge pump outlets</u>. Bilge pump outlets shall be closed with plastic plugs conforming to MIL-C-5501/7 (see figure 11). A warning tag bearing the information: "BILGE PUMP OUTLETS CLOSED: PRIOR TO OPERATING BILGE PUMP, REMOVE PLUGS FROM OUTLETS", shall be secured to the bilge pump operating pump operating switch.
- 3.3 <u>Materials</u>. Materials shall be as specified herein and in referenced specifications and drawings. Material shall be free of defects which adversely affect performance or serviceability and appearance of the finished product (see 4.5.1 and 6.5).

3.4 Loading.

3.4.1 <u>Loading flat cars</u>. Loading of vehicles on top railroad cars shall be in accordance with the applicable requirements of Section 1, General Rules Governing the Loading of Commodities on Open Top Cars and figure 87 or 87A, Section 6, Rules Governing the Loading of Department of Defense Material on Open Top Cars, publication of the Association of American Railroads.

- 3.4.2 <u>Highway shipment</u>. Loading of vehicles for shipment by haulaway and rules for shipment by driveaway or towaway shall be in accordance with Department of Transportation publication Federal Motor Carrier Safety Regulations and applicable military publications.
 - 3.4.3 Reprocessing engine after loading.
- 3.4.3.1 <u>Level A</u>. If engine is operated in connection with the moving of vehicle to loading area or during loading itself, the engine shall be reprocessed as specified in 3.1.8.6 through 3.1.8.6.4 and 3.1.8.6.6.
- 3.4.3.2 <u>Level B</u>. If engine is operated in connection with movement of vehicle for loading or unloading, there shall be no additional processing of engine.
- 3.5 <u>Marking</u>. In addition to any special marking required in the contract (see 6.2), vehicle shall be marked in accordance with MIL-STD-129.
- 3.5.1 <u>Lifting points</u>. The legend "LIFT HERE", with arrow pointing to the lifting eye, shall be stenciled adjacent to each lifting eye using black ink conforming to A-A-208.
- 3.6 <u>Drive-on/drive-off capability</u>. The following provisions shall apply when vehicle is to be operated for loading or unloading (see 6.2).
- 3.6.1 <u>Additional fuel</u>. Additional fuel shall be added as required to accomplish movement of vehicle (see 6.2).
- 3.6.2 <u>Batteries and electrolyte</u>. New batteries with electrolyte added and fully charged shall be installed in the vehicle and battery cables shall be properly connected (ref. 3.1.9.1 and 3.1.9.2). After vehicle self-movement for loading or placement in storage, the ground cable at battery shall be disconnected and then secured to battery carrier with 3/4 inch (in.) wide tape conforming to Type IV of ASTM D5330. A tag bearing the following message: "Vehicle preserved for drive-away condition. Before cranking, connect ground cable to battery terminal. Engine and fuel tanks not preserved", shall be located in a conspicuous location in the driver compartment.

4. QUALITY ASSURANCE PROVISIONS

4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use any facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any inspections

set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

- 4.1.1 <u>Inspection records</u>. Contractor shall maintain records of all inspections performed and such records shall be readily available for review by the Government representative.
- 4.2 One of the first 10 production processed vehicles. One of the first 10 production processed vehicles (see 3.1.1) shall be subjected to the inspection and tests specified in 4.5.
- 4.3 <u>Production processed vehicles</u>. Unless otherwise specified (see 6.2), all production vehicles shall be subjected to the inspection and tests specified in 4.5.2 through 4.5.2.3.
- 4.4 <u>Rejection</u>. Failure of one of the first 10, or any production vehicle, to conform to the applicable requirements of this purchase description, shall be cause for rejection of the vehicles by the Government. Vehicles shall not be accepted until objective evidence that the contractor has corrected the condition causing the rejection has been provided to the Government.
 - 4.5 Quality conformance inspection.
- 4.5.1 <u>Materials</u>. All materials to be used in processing of vehicles shall be inspected in accordance with the material specification. Certified inspection and laboratory test reports shall be provided which show that furnished materials conform to the applicable material specification (see 6.5), except for materials that have been inspected by the Government at source. Materials listed on a Qualified Products List shall be obtained from one of the approved sources indicated.
- 4.5.2 <u>Processing</u>. Unless otherwise specified, vehicle processing shall be inspected to determine conformance to this purchase description. Inspection of processing shall include all items specified in table I and 4.5.2.1 through 4.5.2.4.
- 4.5.2.1 <u>Cleaning</u>. Interior of vehicles shall be examined for cleanliness to determine conformance to 3.1.7.1. One vehicle each day shall be tested for cleanliness in accordance with the applicable provisions of MIL-STD-2073-1. To determine conformance to 3.1.7.2, exterior of vehicle shall be examined for cleanliness. Surfaces on which tape is to be applied, shall be examined for cleanliness before application.
- 4.5.2.2 <u>Fuel tank</u>. To determine conformance to 3.1.8.8, visual inspection of preservative application shall be accomplished to assure addition of the correct amount of oil based upon a known amount of residual fuel.
- 4.5.2.3 <u>Cooling system</u>. To determine conformance to 3.1.8.4, one processed vehicle shall be selected at random from each day's production. The engine coolant shall be tested using

a hydrometer-thermometer type tester with a range of minus 60°F to plus 160°F conforming to GG-T-250.

4.5.2.4 Engine. To determine conformance to 3.1.8.6.1 through 3.1.8.6.3 as applicable, interior of the engine from one of the first 10 production processed vehicles shall be examined for surface coverage. Engine shall be disassembled to the extent necessary to permit visual examination of all surfaces within the combustion chamber. The combustion chamber is all surfaces within the cylinder from and including the surfaces of the head within the cylinder. All surfaces within the combustion chamber shall have a "wet" coating of preservative oil as is obtained when the item is dipped or flushed with the oil. The processing method of the approved preserved engine shall be submitted in writing for use in processing engines in all subsequent production vehicles.

5. PACKAGING

This section is not applicable to this purchase description.

6. NOTES

(This section contains information of a general or explanatory nature which may be helpful, but is not mandatory.)

- 6.1 <u>Intended use</u>. This purchase description covers processing of the F12253500 vehicle for storage outside of buildings, immediate use, domestic or overseas and including carloading.
 - 6.2 Ordering data. Acquisition documents must specify the following:
 - a. Title, number, and date of this purchase description.
 - b. Applicable level of processing (see 1.2).
 - c. If inspection of one of the first 10 production processed vehicles is not required (see 3.1.1).
 - d. Applicable procedure for protection of cooling system (see 3.1.8.4).
 - e. If BII should be processed, packed, or stored other than as specified (see 3.1.9.6).
 - f. If tape-over spray closure is not required (see 3.1.10.1).
 - g. If inspection and tests other than these specified are required (see 4.3).
 - h. If additional fuel shall be supplied (see 3.6.1).
 - i. If special marking is required (see 3.5).
 - j. If draining of residual fuel from fuel tank is required for Level "B" processing (see 3.2.5).
 - k. If vehicle drive-on/drive-off capability is required (see 3.6).

- 6.3 <u>Safety precautions</u>. Caution should be exercised in handling carbon dioxide (CO₂) fire extinguisher cylinders. Cylinders should not be dropped, permitted to strike each other, or be handled roughly. Extreme care should be exercised during the reinstallation operation to avoid tripping fire extinguisher control trigger (see 3.1.9.5).
- 6.4 <u>Forms</u>. A copy of the "Equipment Log Book" and all required forms (see 3.1.6) will be furnished to the contractor by the Government at least 30 days before shipment of the vehicles required by the contract delivery schedule.
- 6.5 <u>Recycled materials</u>. The use of recycled materials which meet the requirements of the applicable material specifications without jeopardizing the intended use of the item shall be encouraged.
- 6.6 <u>Changes from previous issue</u>. Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

TABLE I. <u>Processing inspection</u>. (See indicated paragraphs for Level A, B, requirements)

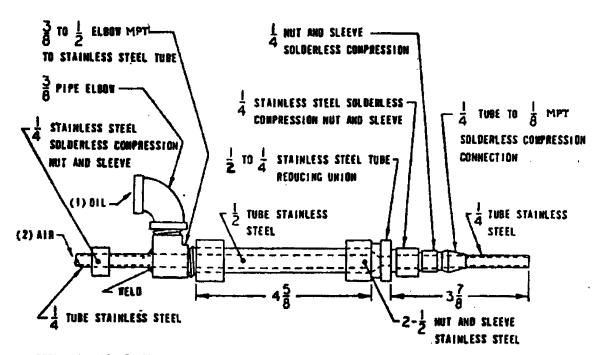
(See indicated page 1)	Cleaning		vation		g/stowage
Component	Levels	Level	Level	Level	Level
	A & B	A	В	A	В
Processing records				3.1.4	3.1.4
Disassembly				3.1.5	3.1.5
Matchmarking				3.1.5.1	3.1.5.1
Interior of vehicle	3.1.7.1				
Battery supports & retainers	3.1.7.1.1	3.1.8.2	3.1.8.2		
Backrests & seats	3.1.7.1.2			3.1.9.3	3.2.6
Exterior of vehicle	3.1.7.2				
Relubrication		3.1.8.1	3.1.8.1		
Transmission, transfer assembly,					
control differential, and final drives 1/		3.1.8.3	3.2.1		
Engine crankcase <u>1</u> /		3.1.8.5	3.2.2		
Compression ignition engine		3.1.8.6	3.2.3		
Preservation through fuel system &		3.1.8.6.1	3.2.3		
combustion chamber					
Engine purging		3.1.8.6.2	3.2.3		
Preservation through air intake &		3.1.8.6.3	3.2.3	3.1.8.6.3	
exhaust system <u>1</u> /					
Preservation through oil level gage rod		3.1.8.6.4	3.2.3	3.1.8.6.4	
opening					
Preservation through flywheel housing		3.1.8.6.5			
Air cleaner				3.1.8.6.6	
Personnel & engine compartment		3.1.8.7	3.2.4	3.1.8.7	
heater & lines					3.2.4
Fuel tank		3.1.8.8	3.2.5		
Cooling system <u>1</u> /		3.1.8.4	3.1.8.4		
Water & antifreeze procedure		3.1.8.4.1	3.1.8.4.1		
Arctic antifreeze procedure		3.1.8.4.3	3.1.8.4.3		
Water & corrosion inhibitor procedure		3.1.8.4.2	3.1.8.4.2		
Ramp winch assembly		3.1.8.9	3.1.8.9		
Ramp hydraulic reservoir		3.1.8.9.1	3.1.8.9.1		
Weapon station opening				3.1.8.10	3.1.8.10
Hatches & doors		3.1.8.11	3.1.8.11	3.1.8.11	3.1.8.11
Engine compartment access plate		3.1.8.12.1	3.1.8.12.1	3.1.9.7	3.1.9.7
Engine compartment access panels				3.1.8.12.2	3.2.8
Miscellaneous preservation		3.1.8.13	3.1.8.13		
Dry charged batteries & cables		3.1.9.1	3.1.9.1	3.1.9.1	3.1.9.1
Electrolyte				3.1.9.2	3.1.9.2
Periscopes				3.1.9.4	3.1.9.4
Fire extinguishers				3.1.9.5	3.1.9.5

TABLE I. <u>Processing inspection</u>- continued.

(See indicated paragraphs for Level A, B, requirements)

	Cleaning	Preser	vation	Packagin	g/stowage
Component	Levels	Level	Level	Level	Level
	A & B	A	В	A	В
Record forms				3.1.6	3.1.6
Tow hooks				3.1.9.8	3.2.7
Basic issue items				3.1.9.6	3.1.9.6
Strapping				3.1.9.6.1	3.1.9.6.1
Vehicle closure				3.1.10.1	3.2.9
Vision block openings					3.2.10
Bilge pump outlets					3.2.11
Loading on flat cars				3.4.1	3.4.1
Highway shipment				3.4.2	3.4.2
Reprocessing engine after loading				3.4.3.1	3.4.3.2
Marking				3.5	3.5
Lifting points				3.5.1	3.5.1

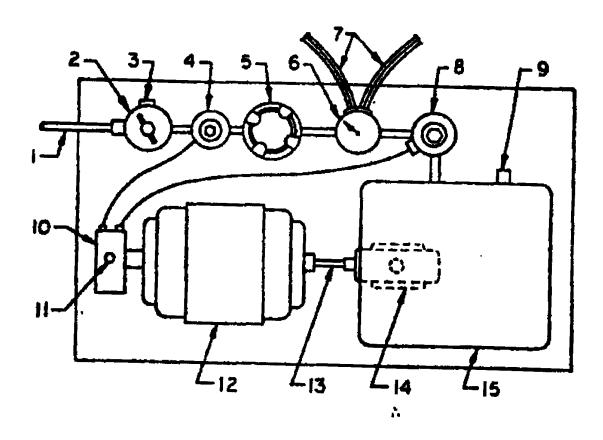
^{1/} Inspect DD Form 1397.



NOTE: (1) AND (2) CONNECT TO CORRESPONDING LINES ON FIGURE 3

FARRICATION DETAILS FOR OIL SPRAY ATOMIZING WOZZLE

FIGURE 1. Atomizing device.

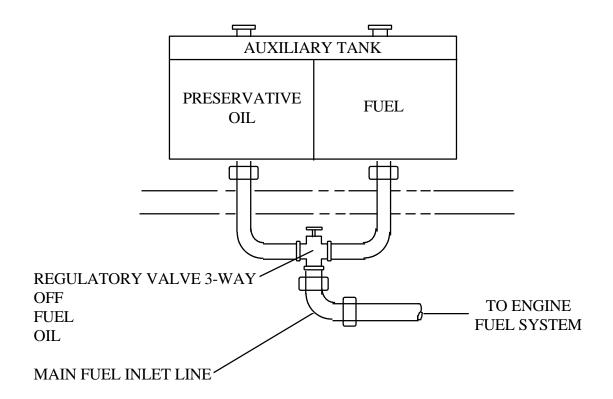


- 1. AIR LINE
- 2. AIR PRESSURE REGULATOR
- 3. AIR PRESSURE GAGE
- 4. SOLENOID VALVE
- 5. MOISTURE SEPARATOR
- 6. OIL PRESSURE GAGE
- 7. TWO DOUBLE TAPED LINES
- 8. SOLENOID VALVE

- 9. OIL TANK LEVEL GAGE
- 10. ELECTRIC JUNCTION BOX
- 11. ELECTRIC LINE
- 12. MOTOR 1/4 HP
- 13. SHAFT
- 14. POSITIVE DISPLACEMENT OIL PUMP
- 15. OIL TANK

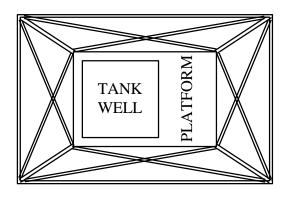
NOTE: This equipment has proven satisfactory for atomized spraying of preservative oil in conjunction with figure 2.

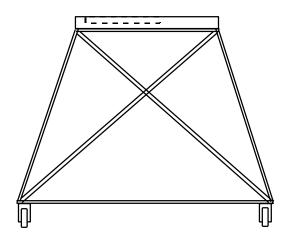
FIGURE 2. Pressure pump.

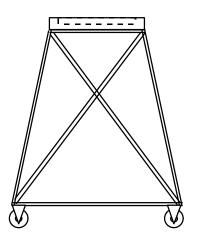


Sheet 1 of 2

FIGURE 3. Auxiliary fuel container.

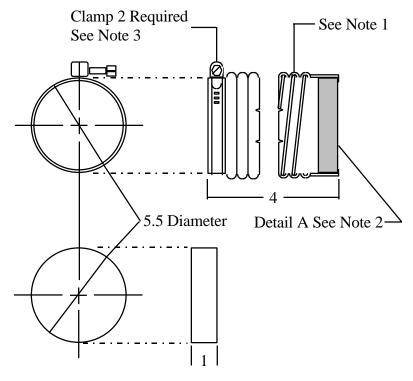






Sheet 2 of 2

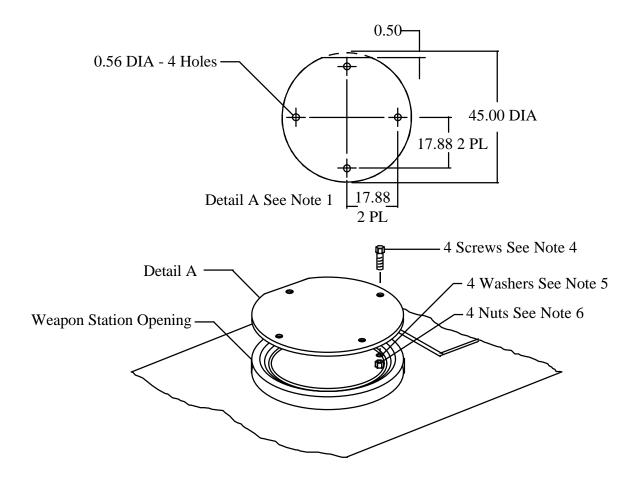
FIGURE 3. <u>Auxiliary fuel container</u> - Continued.



Detail A-1 Required

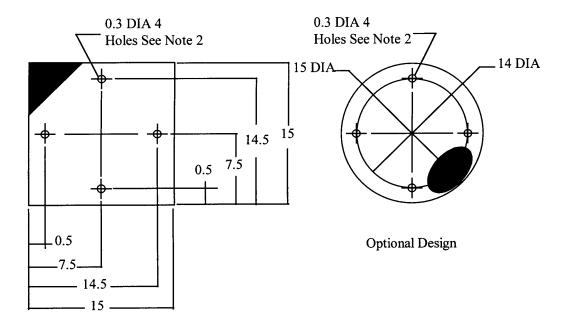
- 1. Hose flexible to be made from material conforming to A-A-52546 or equivalent.
- 2. Plug to made from 1 inch plywood conforming to A-A-55057.
- 3. Use A-A-52546 or equivalent clamps.

FIGURE 4. Boot, air restrictor.



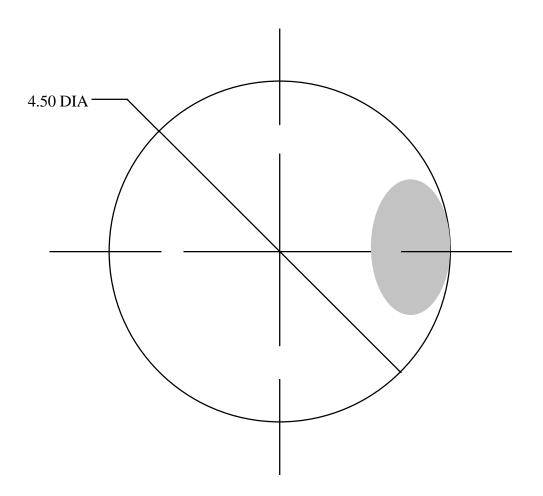
- 1. Material: Plywood, A-A-55057 with ext. glue, .50 thk.
- 2. Secure with tape as shown on figure 7.
- 3. Tol on decimals $\pm .06$.

FIGURE 5. Weapon station cover.



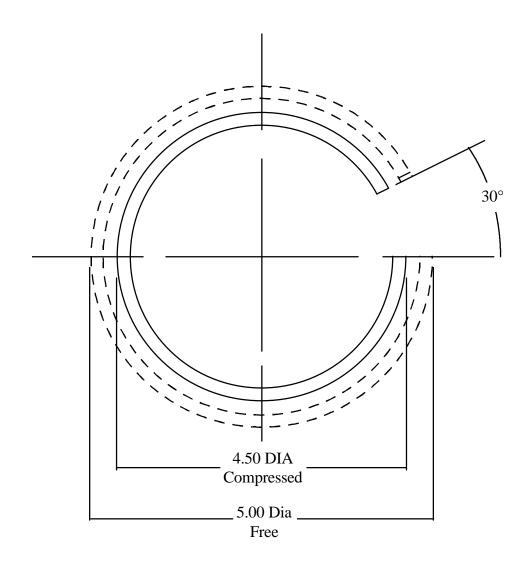
- 1. Material: Wire cloth, , 4x4 mesh, 0.0346 dia., ASTM E437.
- 2. Holes may be formed with drift pin at installation.

FIGURE 6. Screen.



1. Material: Wire cloth, 4x4 mesh, 0.0348 dia, ASTM E437.

FIGURE 6A. Screen.



1. Material: Wire, steel, music, spec ASTM A228/A228M, 0.156 dia.

FIGURE 6B. Spring retainer.

APPENDIX A

REQUIREMENTS FOR TAPE-OVER SPRAY VEHICLE PROTECTION USING STRIPPABLE COATING FOR F12253500 VEHICLE

A.1 SCOPE

A.1.1 <u>Scope</u>. This appendix covers requirements for taping, closing of openings, and applying strippable coating to the taped and closed areas of F12253500 vehicle.

A.2 APPLICABLE DOCUMENTS

A.2.1 <u>Issues of documents</u>. The following documents, for the issue in effect of date of invitation for bids or request for proposal, form a part of this appendix to the extent specified herein.

SPECIFICATIONS

FEDERAL

L-P-378	- Plastic Sheet and Strip Thin Gauge, (Polyolefin).
TT-I-1795	- Ink, Marking Stencil, Opaque (Porous and Nonporous
	Surfaces).
LLL-B-810	- Building Board (Hard Board), Hard Pressed, Vegetable
	Fiber.

DEPARTMENT OF DEFENSE

MIL-C-5501	- Cap and Plug, Protective, Dust and Moisture Seal.
MIL-C-5501/7	- Cap and Plug, Protective, Dust and Moisture Seal (Cap-
	Plug, General Purpose).
MIL-C-6799	- Coating, Sprayable, Strippable, Protective, Water
	Emulsion.
MIL-S-15847	- Spray Gun and Accessories, Paint and Dope, Aircraft
	Use.
MIL-C-16555	- Coating, Compound, Strippable, Sprayable.
MIL-T-22085	- Tape, Adhesive, Preservation and Sealing.

APPENDIX A

A.3 REQUIREMENTS

A.3.1 <u>Facilities for application</u>. Application for sprayable, strippable solvent base compounds conforming to MIL-C-16555, shall be conducted in any standard paint area. Compound conforming to Type II, classes 1 and 5 of MIL-C-6799 water base material may be applied indoors without special precautions. All compounds may be applied outdoors in an area protected from dust, wind, and rain provided the temperature is not below +40°F.

A.3.2 Equipment.

A.3.2.1 <u>Spray gun</u>. A DeVilbiss MBC model spray gun with an ff fluid tip and a No. 765 air cap or equal, shall be used. Accessories such as pressure tanks, agitator hoses, oil and water separator, gages, and regulators shall conform to MIL-S-15847. All lines and equipment used for MIL-C-16555 materials shall be kept free from water.

A.3.2.2 Care of spray equipment.

- A.3.2.2.1 <u>Continuous operation</u>. For short period of nonuse not exceeding 4 hours and at the close of each work day, the pressure pot shall be filled to maximum level with compound. The spray gun shall be turned off and then triggered to fill the line and gun with compound. To prevent clogging of spray head, spray gun shall be immersed into a pail of methyl ethyl ketone when using MIL-C-16555 materials; or water when using MIL-C-6799, Type II, classes 1 and 5. When airless type spray equipment is used, the 5 gallon container of compound shall be removed and reclosed and a 5 gallon container of the applicable solvent substituted. The equipment shall be operated until accessories such as lines, gun, and agitator are clean.
- A.3.2.2.2 <u>Intermittent operation</u>. When periods of nonuse are indeterminate, the compound shall be replaced in its original container or placed into a container affording equal protection. The spray equipment shall be cleaned with the applicable solvent.

A.3.3 Preparation of surfaces.

- A.3.3.1 <u>Cleaning and drying</u>. Prior to application of tape and overspray, vehicle top surfaces shall meet the cleaning inspection requirements of 4.5.2.1.
- A.3.3.2 <u>Preparation of openings</u>. Due to the inability of the coating material to bridge openings, closures shall be effected as indicated in A.3.3.2.1 through A.3.3.2.6 and as shown in figure 7.

APPENDIX A

- A.3.3.2.1 <u>Engine grilles</u>. The intake grille shall be covered with a single piece of hardboard conforming to figure 8-1 and secured with a 2 or 3 inch width tape in accordance with A.3.3.2.6. The exhaust grille shall be covered with a single piece of hardboard conforming to figure 8-2 and secured with 2 or 3 inch width tape in accordance with A.3.3.2.6.
- A.3.3.2.2 <u>Periscope openings</u>. Each periscope opening shall be closed with plugs conforming to figures 8-3, 8-4, 8-5, and as shown in figure 7.
- A.3.3.2.3 <u>Periscope guard on driver hatch</u>. The periscope guard shall be covered with polyethylene conforming to Type I, L-P-378, secured with tape or shall be closed with tape alone in accordance with A.3.3.2.6.
- A.3.3.2.4 <u>Bilge pump outlets</u>. Bilge pump outlets shall be closed with plastic plugs conforming to MIL-C-5501/7 (see figure 7). A warning tag bearing the information: "BILGE PUMP OUTLETS CLOSED: PRIOR TO OPERATING BILGE PUMP, REMOVE PLUGS FROM OUTLETS", shall be secured to the bilge pump operating switch.
- A.3.3.2.5 Openings 1-1/2 in. wide and under. Openings 1-1/2 in. wide and under shall be closed with 2 or 3 in. width tape, as applicable. See figure 7 for openings requiring taping. Taping shall conform to A.3.3.2.6.
- A.3.3.2.6 <u>Taping requirements</u>. Tape shall conform to Type III of MIL-T-22085. Tape shall be applied with minimum wrinkling. Wrinkles shall be cut through and edges overlapped on turns or irregular surfaces. Tape shall be pressed down with a wooden paddle at time of application and shall be applied in longest possible lengths to minimize overlapping. When taping peripheral edges of circular hatches, use 3 or 5 in. width tape, cutting slits about 1/2 in. long and 1 in. apart along edge to be adhered to vehicle top (see figure 9).
- A.3.3.3 <u>Stenciling</u>. Stenciled information shall be covered with automobile wax or tape conforming to Type III of MIL-T-22085 prior to application of strippable compound.

A.3.4 Sprayable, strippable compound.

A.3.4.1 <u>Material</u>. Those areas of the vehicle top surface closed and taped as specified in A.3.3.2 through A.3.3.2.5 shall be oversprayed with sprayable, strippable compound. Compound shall conform to one of the following optional systems:

APPENDIX A

- a. MIL-C-16555
- b. MIL-C-6799, Type II, class 1, base coat with MIL-C-6799, Type II, class 5 top coat.

MIL-C-16555 and MIL-C-6799, Type II, class 5, shall be olive drab color. Applications shall be as specified in A.3.4.3.1 through A.3.4.3.2.

A.3.4.2 <u>Handling of material</u>. The compound shall be prepared for application under clean conditions with clean equipment. The container shall not be opened until ready for use. Before opening, the cover shall be wiped clean, then the container shall be opened carefully to prevent contaminants falling into the compound. Any skins present shall be carefully removed. When the material is to be used in a pressure pot, any settled pigment shall be strained through fine mesh wire gauze of cheesecloth into the pressure pot. Prior to use, the compound shall be of a smooth, homogenous consistency resembling cream. When the material is to be used in an airless system such as Grayco, the 5 gal container of material shall be used in the system provided sufficient agitation is allowed prior to spraying to assure homogenous consistency of the compound.

A.3.4.3 Application.

- A.3.4.3.1 <u>MIL-C-16555</u>. The coating shall be applied over the closed and taped areas in a box coat fashion holding the gun 8 to 10 in. from the surface. The coating shall extend at least 2 in. beyond each tape edge and completely over the hardboard closures. A final dry film thickness of at least 35 mils shall be obtained. Final coating shall be air dried for no less than 2 hours.
- A.3.4.3.2 <u>MIL-C-6799</u>, <u>Type II</u>. This is a two-step system. An initial coating of black colored material conforming to Type II, class 1 of MIL-C-6799 shall be applied over the closed and taped areas in a box coat fashion. A wet film shall be deposited by holding the spray 8 to 10 in. from the surface. The coating shall extend 2 in. beyond all taped areas and shall completely cover the hardboard closures. Coating of the entire vehicle top is permitted as an option. After a minimum drying period of 2 hours, a final coat consisting of Type II, class 5 of MIL-C-6799 shall be applied and shall completely cover the base coat. Minimum final coating thickness of the top coat shall be 4 mils and the entire coating shall be 12 mils.
- A.3.5 <u>Repair of coated surfaces</u>. After application and drying of coating compound, the coated surfaces shall be inspected thoroughly for holes in the film. Special attention shall be given to areas covered by tape. All defects shall be corrected by reapplication of top coating compound.

APPENDIX A

A.3.6 <u>Marking</u>. Original markings (see 3.5) shall not be disturbed. The following information shall be stenciled on the side of the vehicle using white ink conforming to TT-I-1795: "STRIPPABLE COATING, DATE AND LEVEL OF PRESERVATION, PRESERVING ACTIVITY, REMOVE COATING, TAPE, AND CLOSURES PRIOR TO OPERATING VEHICLE". Stenciling shall be not less than 3/4 in. high.

A.4 VERIFICATION

- A.4.1 <u>General</u>. Refer to Section 4 for inspection responsibility, selection, rejection, and quality conformance inspection.
- A.4.2 <u>Processing</u>. Inspection of processing shall include inspection specified in A.3.5. In addition, inspection shall be made on the wet coating with a wet film gage or a small section of the dry coating shall be removed and checked with a dry film gage. The cut-away areas shall be repaired with tape conforming to Type III of MIL-T-22085 and oversprayed with the coating material. If the measured film is less than the minimum required thickness, another top coat shall be applied.
- A.4.3 Water spray test. One of the first 10 production vehicles shall be subjected to a water spray test. Water at the rate of 3-5 gallon per minute (gal/min) shall be sprayed over the entire top surface of the vehicle from a height of 5 ft for 4 hours. The spray device shown in figure 10 has proven satisfactory to spray the vehicle. Any leakage through the oversprayed area shall be cause for rejection. Leaking vehicle shall be reinspected for leak areas and defective areas shall be resprayed and retested.

APPENDIX A

INDICATES TAPED AREAS

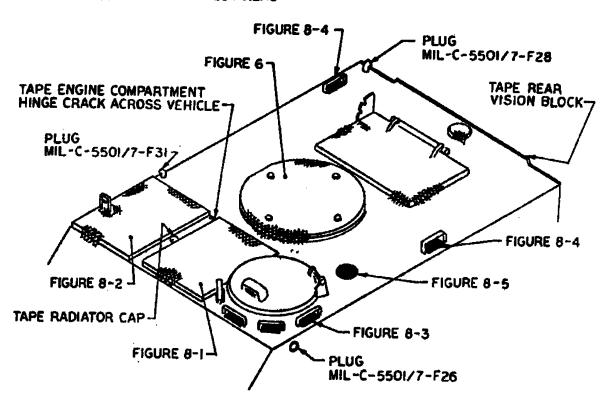
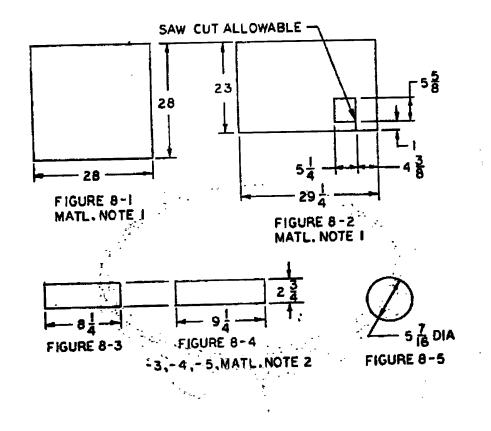


FIGURE 7. Tape and overspray closure.

APPENDIX A



- 1. Matl: Hardboard, LLL-B-810, Type II, surface II, finish D, design A, 1/8 in. thick.
- 2. Matl: Cushioning, PPP-C-1752, Type I, class 2, 2 in. thick.
- 3. Smooth rough edges.
- 4. All dimensions are in inches, tolerance $\pm 1/8$ for -1, -2, $\pm 1/8$, -0 for -3, -4 and -5.

FIGURE 8. Panels and cushioning.

APPENDIX A

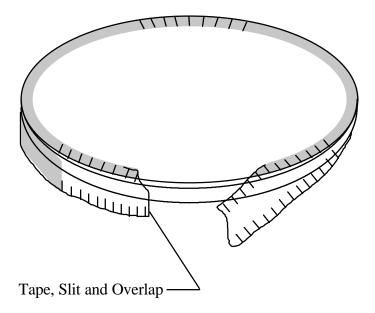


FIGURE 9. <u>Taping rounded areas</u>.

APPENDIX A

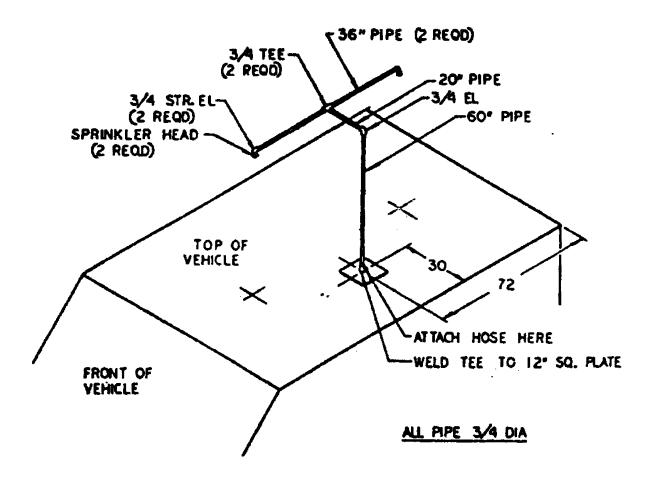


FIGURE 10. Water spray device.

APPENDIX A

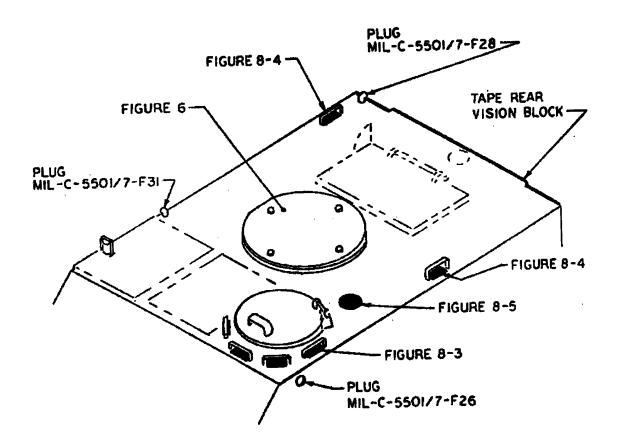


FIGURE 11. Level B closure.